What is claimed is:

1. In a communication system comprising a plurality of mobile stations and a switched beam antenna system, wherein the switched beam antenna system comprises an infrastructure and a plurality of beams for conveying user information from the infrastructure to the plurality of mobile stations, a method for conveying user information to each mobile station of the plurality of mobile stations, the method comprising a step of scheduling a different mobile station of the plurality of mobile stations for substantially simultaneous use of each beam of the plurality of beams.

2. The method of claim 1, wherein a first mobile station of the plurality of mobile stations is included in a first beam of the plurality of beams, wherein a second mobile station of the plurality of mobile stations is included in a second beam of the plurality of beams, wherein the communication system further comprises a shared communication channel, and wherein the method further comprises steps of:

assigning a first portion of the shared communication channel to the first mobile station;

assigning a second portion of the shared communication channel to the second mobile station;

transmitting the first portion of the shared communication channel in the first beam; and

transmitting the second portion of the shared communication channel in the second beam.

3. The method of claim 2, wherein the communication system further comprises a control channel and wherein the method further comprises a step of transmitting the control channel in each of the first beam and the second beam.

4. The method of claim 3, wherein the control channel comprises a first control channel, wherein the communication system further comprises a second control channel that is associated with the first mobile station and not with the second mobile station, and wherein the method further comprises a step of transmitting the second control channel in the first beam but not in the second beam.

5. The method of claim 2, wherein the communication system further comprises a plurality of voice channels and a plurality of data channels and wherein the method further comprises steps of:

transmitting a first voice channel of the plurality of voice channels and a first data channel of the plurality of data channels in the first beam; and

transmitting a second voice channel of the plurality of voice channels and a second data channel of the plurality of data channels in the second beam.

6. The method of claim 5, further comprising steps of:

transmitting a third voice channel of the plurality of voice channels and a third data channel of the plurality of data channels in a third beam of the plurality of beams; and

transmitting noise in a portion of the shared communication channel associated with the third beam.

7. The method of claim 1, wherein a first mobile station of the plurality of mobile stations is included in a first beam of the plurality of beams, wherein a second mobile station of the plurality of mobile stations is included in a second beam of the plurality of beams, wherein the communication system further comprises a plurality of orthogonal codes, and wherein the method further comprises steps of:

assigning a first set of orthogonal codes of the plurality of orthogonal codes to the first mobile station;

assigning a second set of orthogonal codes of the plurality of orthogonal codes to the second mobile station;

transmitting the first set of orthogonal codes in the first beam; and

transmitting the second set of orthogonal codes in the second beam.

8. The method of claim 7, the communication system has a shared communication channel that comprises the plurality of orthogonal codes.

9. The method of claim 8, wherein the first set of orthogonal codes comprises a different proportion of the plurality of orthogonal codes than the second set of orthogonal

codes.

10. The method of claim 1, wherein the communication system is divided into a plurality of geographic sectors, and wherein each beam of the plurality of beams is transmitted in a same sector of the plurality of sectors.

11. The method of claim 10, further comprising a step of allocating to each beam of the plurality of beams an approximately same proportion of a total transmitted power allocated to the sector that includes the beams.

12. The method of claim 10, further comprising a step of allocating to each beam of the plurality of beams a different proportion of a total transmitted power allocated to the sector that includes the beams than the proportion of the total transmitted power allocated to the other beams of the plurality of beams.

13. In a communication system comprising a switched beam antenna system that generates a plurality of predetermined, fixed beams, a base station subsystem comprising:

an antenna array comprising a plurality of array elements;

a plurality of weighters, wherein each weighter of the plurality of weighters is coupled to an element of the plurality of elements; and

a processor coupled to each weighter of the plurality of weighters, wherein the processor conveys a first set of weighting coefficients to the weighters for a conveyance of information to a first mobile station of a plurality of mobile stations and further conveys a second set of weighting coefficients to the weighters for a conveyance of information to a second mobile station of the plurality of mobile stations, wherein the first set of weighting coefficients are utilized by the weighters to transmit a first beam of the plurality of beams to the first mobile station and wherein the second set of weighting coefficients are utilized by the weighters to transmit a second beam of the plurality of beams to the second mobile station.

14. The base station subsystem of claim 13, further comprising a scheduler that assigns the first beam to the first mobile station and assigns the second beam to the second mobile station.

15. The base station subsystem of claim 13, wherein the processor comprises a spreading code generator that generates a first set of spreading codes for transmissions of information to the first mobile station in the first beam and that further generates a second set of spreading codes for transmissions of information to the second mobile station in the second beam.

16. The base station subsystem of claim 13, wherein the base station subsystem transmits at least a first portion of a shared communication channel in the first beam and at least a second portion of the shared communication channel the second beam.

17. The method of claim 16, wherein the shared communication channel comprises a plurality of orthogonal codes.

18. The base station subsystem of claim 16, wherein the base station subsystem further transmits a control channel in each of the first beam and the second beam.

19. The base station subsystem of claim 18, wherein the control channel comprises a first control channel and wherein the base station subsystem further transmits a second control channel in the first beam but not in the second beam.

20. The base station subsystem of claim 16, wherein the base station subsystem further transmits a first voice channel of a plurality of voice channels and a first data channel of a plurality of data channels in the first beam and transmits a second voice channel of the plurality of voice channels and a second data channel of the plurality of data channels in the second beam.

21. The base station subsystem of claim 20, wherein the base station subsystem further transmits a third voice channel of the plurality of voice channels and a third data channel of the plurality of data channels in a third beam of the plurality of beams, and transmits noise in a portion of the shared communication channel associated with the third beam.

22. The base station subsystem of claim 13, wherein the station subsystem operates in a communication system that is divided into a plurality of geographic sectors and wherein each beam of the plurality of beams is transmitted in a same sector of the plurality of sectors.

23. The base station subsystem of claim 22, wherein the base station subsystem allocates a total transmitted power to the sector that includes the beams and wherein the base station subsystem further allocates to each beam of the plurality of beams an approximately same proportion of a total transmitted power allocated to the sector that includes the beams.

24. The base station subsystem of claim 22, wherein the base station subsystem allocates a total transmitted power to the sector that includes the beams and wherein the base station subsystem further allocates to each beam of the plurality of beams a different

proportion of a total transmitted power allocated to the sector that includes the beams than the proportion of the total transmitted power allocated to the other beams of the plurality of beams.